U. S. GEOLOGICAL SURVEY GEORGE OTIS SMITH, DIRECTOR



PLATE I.—LANSING FORMATION, INCLUDING PLATTSBURG LIMESTONE MEMBER, WHICH APPEARS IN TWO LEDGES IN MIDDLE OF CLIFF.

Near mouth of Ninemile Creek, Lansing, Kans.

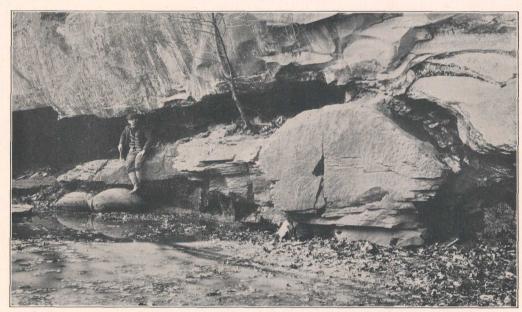


PLATE III.—MASSIVE SANDSTONE AT BASE OF LAWRENCE SHALE MEMBER OF DOUGLAS FORMATION.

Concretions at stream level are characteristic of the basal part of the sandstone. One mile southeast of Linkville, Mo.



PLATE VI.-LOWER PART OF OREAD LIMESTONE MEMBER OF DOUGLAS FORMATION.

In road cut on Government Hill, northwest of Leavenworth, Kans.



PLATE VIII.—CRUMPLED AFTONIAN (?) INTERGLACIAL DEPOSITS DISTORTED PROBABLY BY BEING OVERRIDDEN BY KANSAN GLACIER.

Crow Creek, east of Smithville, Mo.

ILLUSTRATIONS

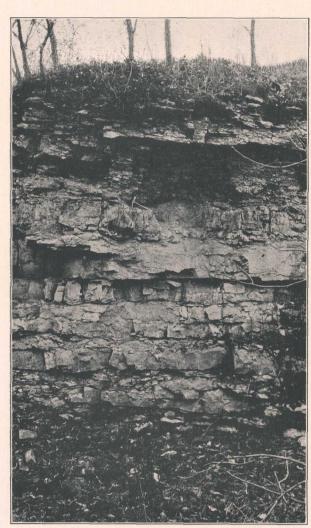


PLATE IV.—MAIN LEDGE OF STANTON LIMESTONE MEMBER OF LANSING FORMATION OVERLAIN UNCONFORMABLY BY BRECCIATED LIMESTONE BEDS AT BASE OF LAWRENCE SHALE MEMBER OF DOUGLAS FORMATION (ABOVE HAMMER).

Two miles southeast of Nashua, Mo.



PLATE IX.—JOINTING IN FARLEY LIMESTONE BED IN LANE SHALE MEMBER OF LANSING FORMATION.

Exposed in bed of brook in southwest corner of Smithville quadrangle, Mo.

MISSOURI-KANSAS LEAVENWORTH—SMITHVILLE QUADRANGLES

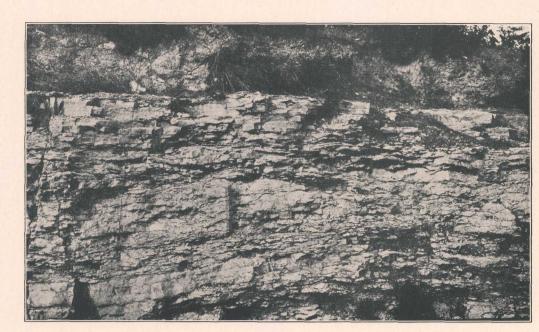


PLATE II.—IATAN LIMESTONE MEMBER OF DOUGLAS FORMATION.

Very thin bedded shaly limestone in railroad cut at latan. Mo.



PLATE V.—BASAL SANDSTONE OF LAWRENCE SHALE MEMBER, WHICH HERE RESTS UNCONFORMABLY ON WESTON SHALE MEMBER OF DOUGLAS FORMATION.

Pit of Leavenworth Vitrified Brick Co., Leavenworth, Kans.



PLATE VII.—INTERGLACIAL BOWLDER BED OF PROBABLE AFTONIAN STAGE.

Near Weston, Mo.



PLATE X.—CLIFF OF LOESS SHOWING CHARACTERISTIC COLUMNAR JOINTING AND INDISTINCT HORIZONTAL BANDING.

Railroad cut near Beverly, Mo.